



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,880	09/22/2003	Zhenglan Xue		3589

25859 7590 03/25/2004
WEI TE CHUNG
FOXCONN INTERNATIONAL, INC.
1650 MEMOREX DRIVE
SANTA CLARA, CA 95050

EXAMINER

GILMAN, ALEXANDER

ART UNIT PAPER NUMBER

2833

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/668,880

Applicant(s)

XUE ET AL.

Examiner

Alexander D Gilman

Art Unit

2833

aw

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 15-20 is/are rejected.
- 7) ☒ Claim(s) 3-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 09/22/2003
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsai et al.

With regard to claim 1, Tsai et al (US 6,234,834) disclose an electrical connector assembly comprising: an insulating housing (2,2,2) comprising a first face and an opposite second face, the insulating housing comprising a first array of receiving spaces (for entering contacts 3, 4) extending from the second face toward the first face thereof and a first array of cavities (223) extending from the first face toward the second face thereof and respectively communicating with the receiving spaces; a plurality of mating ports (222) assembled to the insulating housing and respectively received in the cavities of the insulating housing; a first terminal group (3) assembled to the insulating housing and comprising a plurality of terminal units, each terminal unit comprising a contacting portion exposed in a corresponding receiving space and a plurality of tail portions; a second terminal group assembled to the insulating housing and comprising a plurality of arms respectively extending into the receiving spaces of the housing, and a third terminal group (5) assembled to the insulating housing and electrically connecting with the tail portions of the first terminal group.

With regard to claim 15, Tsai et al disclose a metal shield (1).

With regard to claims 16, 17, Tsai et al disclose all of the limitations as applied to claim 1, including grounding contacts (4) and transition contacts (5).

Claim Rejections - 35 USC § 103

Art Unit: 2833

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsai et al (US 6,234,834) in view of Winning et al

Tsai et al (US 6,234,834) disclose all of the limitations except for a second array of receiving spaces and asymmetrical arrangement of the connectors.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include at least two columns of the connectors in the housing , since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Winning et al (US 6,068,520) disclose asymmetrical arrangement of the connectors (Fig. 1) .

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to dispose the connectors in the modified Tsai et al, as taught by Winning et al , to minimize cross talk (Winning et al ,Abstract).

2. Claims 18, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsai et al (US 6,234,833) in view of Tsai et al (US 6,234,834).

With regard to claim 18, Tsai et al (US 6,234,833) disclose a multi-port connector assembly comprising: an unitary insulative housing (1) defining a plurality of cavities (11) arranged in rows in a front portion and a plurality of receiving spaces in a rear portion and in aligned communication with the corresponding cavities in a front-to-back direction, respectively; said cavities being arranged in a column;

Art Unit: 2833

plural groups of signal terminals (3) forwardly inserted into the corresponding receiving spaces, respectively, said groups being similar to one another, at least two grounding terminals (34) each with arms extending into the corresponding receiving spaces, respectively, plural set of transition contacts (5)

Tsai et al (US 6,234,833) do not disclose a spacer located behind the housing and defining plural sets of vertical passageways, and disposition of the connector in at least two columns.

Tsai et al (US 6,234,834) disclose a spacer (6) located behind the housing.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the spacer at the back side of the housing, as taught by Tsai et al (US 6,234,834), to better organize the transition terminals disposed at the different levels.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include at least two columns of the connectors in the housing , since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

With regard to claim 20, Tsai et al (US 6,234,833) when modified by Tsai et al (US 6,234,834) disclose (Tsai et al (US 6,234,834)) a plurality of retaining blocks (3)

3 Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsai et al (US 6,234,833) in view of Tsai et al (US 6,234,834) as applied to claim 18 above, and further in view of Winning et al. Tsai et al (US 6,234,833) when modified by Tsai et al (US 6,234,834) disclose all of the limitations except for asymmetrical arrangement of the connectors.

Winning et al (US 6,068,520) disclose asymmetrical arrangement of the connectors (Fig. 1) .

Art Unit: 2833

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to dispose the connectors in the modified Tsai et al, as taught by Winning et al , to minimize cross talk (Winning et al ,Abstract)

Allowable Subject Matter

Claims 3-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

No prior art has been found to anticipate or render obvious the presently claimed subject matter. Specifically, none of the prior art of record discloses the combination of the limitations presented including the configuration of the cavities forming a pair of trapeziform spaces and a cylindrical hole connecting the trapeziform spaces, such a combination of the dove-tail elements allows better attach the plurality of connectors of the specified shape to the housing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander D Gilman whose telephone number is 571 272-2004. The examiner can normally be reached on Monday-Friday, 10:30 a.m. - 8:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on 571 272-2800 ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2833

03/16/2004

Alex Gilman
ALEXANDER GILMAN
PRIMARY EXAMINER